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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/787,860	06/18/2002	Hassan Jomaa	12964.22	8031
7590 07/14/2005		EXAMINER		
Tim Wyckoff			CHOI, FRANK I	
Harness, Dickey & Pierce, P.L.C. 11730 Plaza America Drive, Suite 600 Reston, VA 20190				
			ART UNIT	PAPER NUMBER
			1616	

DATE MAILED: 07/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
Office Action Summary		09/787,860	JOMAA, HASSAN			
		Examiner	Art Unit			
		Frank I. Choi	1616			
	The MAILING DATE of this communication ap	pears on the cover sheet with the c	orrespondence address			
•	Period for Reply					
THE - Exte after - If the - If NO - Failu Any	ORTENED STATUTORY PERIOD FOR REPL MAILING DATE OF THIS COMMUNICATION. Insions of time may be available under the provisions of 37 CFR 1. SIX (6) MONTHS from the mailing date of this communication. In period for reply specified above is less than thirty (30) days, a replay period for reply is specified above, the maximum statutory period are to reply within the set or extended period for reply will, by statutively received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply be tim ly within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
Status						
1)⊠	Responsive to communication(s) filed on 08 A	April 2005.				
2a)□	This action is <b>FINAL</b> . 2b) This action is non-final.					
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
5)□ 6)⊠ 7)□	Claim(s) 1-7 and 15-24 is/are pending in the at 4a) Of the above claim(s) is/are withdray Claim(s) is/are allowed.  Claim(s) 1-7 and 15-24 is/are rejected.  Claim(s) is/are objected to.  Claim(s) 1-7 and 15-24 are subject to restriction	wn from consideration.				
Applicati	ion Papers					
9)☐ The specification is objected to by the Examiner.						
10)	10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.					
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
11)	Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the E					
Priority ι	ınder 35 U.S.C. § 119					
a)l	Acknowledgment is made of a claim for foreign  All b) Some * c) None of:  1. Certified copies of the priority documen  2. Certified copies of the priority documen  3. Copies of the certified copies of the priority documen  application from the International Burea  See the attached detailed Office action for a list	ts have been received. ts have been received in Applicationity documents have been receive out (PCT Rule 17.2(a)).	on No ed in this National Stage			
Attachmen	t(s)		SABIHA QAZI, PH.D PRIMARY EXAMINER			
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)						
3) 🔯 Infori	e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date <u>20020618,20031201</u> .	Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:	atent Application (PTO-152)			

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#### **DETAILED ACTION**

### Election/Restrictions

Applicant's election with traverse of Group I, 15-19 in the reply filed on 12/20/2004, and the species 3-(N-acetyl-N-hydroxyamino) propylphosphonic acid in the reply filed on 4/8/2005 is acknowledged. The traversal is on the ground(s) that Group I and Group II claims are directed to the application of particular class of compounds defined in claims 1-7 to a plant. This is not found persuasive because regardless of whether a given plant may be the same, the claims are not directed to a single plant and the action of the active agent on the plant is patentably distinct. Clearly if the plant is desirable, the active agent should not act as a herbicide as it will kill the plant. For the same reasons, there is an undue burden on Examiner since Group I does not require search of the active agent as a herbicide whereas the search of Group II does not require the search of antibacterial or fungicidal activity. Further, there are numerous amount of compounds which fall within the claimed chemical formula. As such, the number of permutations between desirable plant and compound and undesirable plant is enumerous. However, in light of Patterson (US Pat. 4,693,742), see below, the restriction requirement as two Groups I and II are withdrawn. With respect to the election of species requirement, Applicant argues that requiring an election of species is unduly restrictive. However, Applicant has not indicated that the alternative species are obvious over each other. Further, claims 1-7, 21-24 would be classified in 504/203, based on herbicide use, whereas claims 1-7, 15-19 are classified in 514/119, based on bactericidal/fungicidal use, as such, the election of species requirement is proper. However, in light of Patterson (US Pat. 4, 693,742), Examiner expands the species to

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include the compounds falling within the scope of the formula disclosed in Patterson (US Pat.

4,693,742)

As such, claims 1-7, 15-24 are directed to the elected invention with the species being as indicated above.

## Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 15-24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification and claims as originally filed does not recite a method of treating a desirable plant having or susceptible to bacterial and fungal infection or prevention, suppression or elimination of infection in a plant or a method of treating an undesirable plant whetherby the plant will be weakened or killed. Further, the specification and claims as originally filed do not mention anything about use of excipients relative to plant treatment formulations or the form of the plant treatment formulation. There is no disclosure that the composition is applied directly to one or more plant surfaces or that the composition is applied to media in which the plant is growing and subsequently absorbed by the plant from the media.

Claims 15-19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in

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the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The nature of the invention:

The invention is directed to a method of treating desirable plants with an organophosphate compound to treat or prevent a bacterial or fungal infection with 3-(N-acetyl-N-hydroxyamino)propylphosphonic acid.

The state of the prior art and the predictability or lack thereof in the art:

The prior art of record does not appear to disclose said method. Further, 3-(N-acety-N-hydroxyamino)propylphosphonic acid is disclosed as being a herbicide (Column 7, lines 21,22,Column 16).

The amount of direction or guidance present and the presence or absence of working examples:

The Specification does not provide any direction or guidance other than to indicate that the organophosphorous compounds are useful as bactericides and fungicides in plants. There are no working examples showing that the organophosphorous compounds are effective in the control of bacteria and fungi in plants.

The breadth of the claims and the quantity of experimentation needed:

The claims are broad in that the claim treatment or prevention of bacterial infection or fungi infection in any plant with the organophosphorous compounds. In light of the above it appears that one of ordinary skill in the art would be required to do undue experimentation in order to determine the amounts, suitable formulations, suitable modes of administration which

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would be effective in treating or preventing bacterial or fungal infections in plants without killing the plant itself.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7, 20-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Patterson (US Pat. 4,693,742).

Patterson expressly discloses a method of killing plants with a organophosphorous compound falling within the scope of the claimed invention by diluting the organophosphorous compound with water and spraying over flats containing crops and weeds planted in soil (Column 15, lines 47-68, Column 16, lines 1-63).

## Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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Claims 1-7 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-7, 11, 13 of U.S. Patent No. 6,680,308 or claims 1-4, 9, 10 of U.S. Patent No. 6,534,489. Although the conflicting claims are not identical, they are not patentably distinct from each other because the pending Application and said US Patents both contain claims which disclose the claimed organophosphorous compounds.

#### Conclusion

A facsimile center has been established in Technology Center 1600. The hours of operation are Monday through Friday, 8:45 AM to 4:45 PM. The telecopier number for accessing the facsimile machine is 571-273-8300.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank Choi whose telephone number is (571)272-0610. Examiner maintains a flexible schedule. However, Examiner may generally be reached Monday-Friday, 8:00 am – 5:30 pm (EST), except the first Friday of the each biweek which is Examiner's normally scheduled day off.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Mr. Gary Kunz, can be reached at 571-272-0887. Additionally, Technology Center 1600's Receptionist and Customer Service can be reached at (571) 272-1600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). FIC

July 11, 2005

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